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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/526,856	03/03/2005	Jaime Prat Urreiztieta	G80-032 US	5421	
21706	7590 10/24/2006		EXAMINER		
NOTARO AND MICHALOS			LIN, KU	LIN, KUANG Y	
100 DUTCH SUITE 110	HILL ROAD		ART UNIT	ART UNIT PAPER NUMBER	
· · ·	JRG, NY 10962-2100		1725		
			DATE MAILED: 10/24/2004	DATE MAILED: 10/24/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summers	10/526,856	PRAT URREIZTIE	ETA, JAIME			
Office Action Summary	Examiner	Art Unit				
The MANUALO DATE of the	Kuang Y. Lin	1725				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence ad	dress			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)☐ Responsive to communication(s) filed on  2a)☐ This action is FINAL. 2b)☒ This  3)☐ Since this application is in condition for allowant closed in accordance with the practice under E	action is non-final. ace except for formal matters, pro		e merits is			
Disposition of Claims						
4) ☐ Claim(s) 1-12 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-12 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or			·			
Application Papers						
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the original transfer of or the	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CF	` ,			
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	te				

Application/Control Number: 10/526,856

Art Unit: 1725

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Page 2

2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over either US 6,197,850 to Posada Fernandez et al. or US 6,360,808 to Twardowska et al. and further in view of WO 00/73236 to Skerdi (or the corresponding US 6,972,059) and US 3,815,665 to Baur.

Each of the primary references substantially shows the invention as claimed except that their exothermic compositions contain fluoride and that they do not show to form the sleeve as a single piece. However, WO '236 shows that it is desirable to use a fluoride free exothermic composition for forming feeder due to environmental reason. The composition contains aluminum and magnesium as fuel. It would have been obvious to use the exothermic composition of the primary reference free of fluoride and containing aluminum and magnesium as fuel in view of WO '236. (Fluoride functions as a catalyst (see Norton, col. 3, line 36+ and Takashima, col. 4, line 38+. The additional use of magnesium as fuel in WO' 236 is to act as igniting primer (see Montgomery, col. I, line 24+) to compensate the function of fluoride). Further, US '665 shows that it is conventional to form the exothermic sleeve as a single piece. Apparently, forming the sleeve and the breaker core as a single piece has an advantage over the sleeve formed from a multiple pieces in that it does not require an additional

assembling step for forming the sleeve and thus the foundry operation is simpler. It would have been obvious to form the sleeve and the breaker core of the primary references as a single piece in view of the advantage.

3. Claims 1-12 are also rejected under 35 U.S.C. 103(a) as being unpatentable over either US 6,197,850 to Posada Fernandez et al. or US 6,360,808 to Twardowska et al. and further in view of WO 00/73236 to Skerdi (or the corresponding US 6,972,059) and DE 31 13 229.

Each of the primary references substantially shows the invention as claimed except that their exothermic compositions contain fluoride and that they do not show to form the sleeve as a single piece. However, WO '236 shows that it is desirable to use a fluoride free exothermic composition for forming feeder due to environmental reason. The composition contains aluminum and magnesium as fuel. It would have been obvious to use the exothermic composition of the primary reference free of fluoride and containing aluminum and magnesium as fuel in view of WO '236. (Fluoride functions as a catalyst (see Norton, col. 3, line 36+ and Takashima, col. 4, line 38+. The additional use of magnesium as fuel in WO' 236 is to act as igniting primer (see Montgomery, col. I, line 24+) to compensate the function of fluoride). Further, DE '229 shows that it is conventional to form the exothermic sleeve as a single piece. Apparently, forming the sleeve and the breaker core as a single piece has an advantage over the sleeve formed from a multiple pieces in that it does not require an additional assembling step for forming the sleeve and thus the foundry operation is simpler.

Art Unit: 1725

It would have been obvious to form the sleeve and the breaker core of the primary references as a single piece in view of the advantage.

- 4. Applicant's arguments filed October 6, 2006 have been fully considered but they are not persuasive.
  - a. Applicant's main argument is in that Baur uses a refractory and insulting, rather than an exothermic, sleeve. However, both primary references (US 6,197,850 to Posada Fernandez et al. or US 6,360,808 to Twardowska et al.) shows that feature to be conventional. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).
  - b. With respect to the provision of plug in the other opening as claimed, Baur also provides a cover for covering the top opening of the sleeve. The function of the cover is the same as that of claimed plug. Thus, the claimed plug is deemed to be an obvious variation of sleeve structure of Baur. Further, in DE '229 the top cover 18 also performs the same function as the plug of instant application does.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuang Y. Lin whose telephone number is 571-272-1179. The examiner can normally be reached on Monday-Friday, 10:00-6:30,.

Application/Control Number: 10/526,856 Page 5

Art Unit: 1725

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kuang Y. Lin Primary Examiner Art Unit 1725

10-18-06